

CLAIMS

This is a listing of currently pending claims:

Claims 1 - 18. (Canceled)

19. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a BCMA (B Cell Maturation Antigen) polypeptide effective to inhibit B-cell growth or immunoglobulin production, or both, wherein the BCMA polypeptide comprises:

- (a) an amino acid sequence that binds to BAFF (B-cell activating factor of the TNF family; SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 51 of SEQ ID NO:1; or
- (b) an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

20. (Previously presented) The pharmaceutical composition of claim 19 wherein the BCMA polypeptide comprises:

- (a) amino acids 1 to 51 of SEQ ID NO:1; or
- (b) amino acids 8 to 41 of SEQ ID NO:1.

Claims 21 - 24. (Canceled)

25. (Previously presented) The pharmaceutical composition of claim 20 wherein the BCMA polypeptide comprises amino acids 1 to 51 of SEQ ID NO:1.

26. (Previously presented) The pharmaceutical composition of claim 20 wherein the BCMA polypeptide comprises amino acids 8 to 41 of SEQ ID NO:1.

27. (Previously presented) The pharmaceutical composition of claim 19 wherein the BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

Claim 28. (Canceled)

29. (Previously presented) The pharmaceutical composition of claim 19 wherein the BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 51 of SEQ ID NO:1.

Claims 30 - 31. (Canceled)

32. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a BCMA polypeptide effective to inhibit B-cell growth or immunoglobulin production, or both, wherein the BCMA polypeptide comprises:

- (a) an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 51 of SEQ ID NO:1; or

(b) an amino acid sequence that binds to a polypeptide consisting of the sequence of SEQ ID NO:9 and is at least 95% identical to amino acids 8 to 41 of SEQ ID NO:1,
and wherein the BCMA polypeptide does not comprise amino acids 53 to 81 of SEQ ID NO:1.

33. (Previously presented) The pharmaceutical composition of claim 32 wherein the BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 51 of SEQ ID NO:1.

34. (Canceled)

35. (Previously presented) The pharmaceutical composition of claim 33 wherein the BCMA polypeptide comprises amino acids 1 to 51 of SEQ ID NO:1.

36. (Previously presented) The pharmaceutical composition of claim 32 wherein the BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

37. (Canceled)

38. (Previously presented) The pharmaceutical composition of claim 36 wherein the BCMA polypeptide comprises amino acids 8 to 41 of SEQ ID NO:1.

39. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a polypeptide effective to inhibit B cell growth or immunoglobulin production, or both, wherein the polypeptide comprises a BCMA polypeptide consisting essentially of:

- (a) an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 51 of SEQ ID NO:1; or
- (b) an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

40. (Previously presented) The pharmaceutical composition of claim 39 wherein the BCMA polypeptide consists essentially of an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 51 of SEQ ID NO:1

41. (Canceled)

42. (Previously presented) The pharmaceutical composition of claim 40 wherein the BCMA polypeptide consists essentially of amino acids 1 to 51 of SEQ ID NO:1.

43. (Previously presented) The pharmaceutical composition of claim 39 wherein the BCMA polypeptide consists essentially of an amino acid sequence that

binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

44. (Canceled)

45. (Previously presented) The pharmaceutical composition of claim 43 wherein the BCMA polypeptide consists essentially of amino acids 8 to 41 of SEQ ID NO:1.

46. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a soluble BCMA polypeptide effective to inhibit B-cell growth or immunoglobulin production, or both, wherein the soluble BCMA polypeptide comprises:

- (a) an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 51 of SEQ ID NO:1; or
- (b) an amino sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

47. (Previously presented) The pharmaceutical composition of claim 46 wherein the soluble BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 51 of SEQ ID NO:1.

48. (Canceled)

49. (Previously presented) The pharmaceutical composition of claim 47 wherein the soluble BCMA polypeptide comprises amino acids 1 to 51 of SEQ ID NO:1.

50. (Previously presented) The pharmaceutical composition of claim 46 wherein the soluble BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

51. (Canceled)

52. (Previously presented) The pharmaceutical composition of claim 50 wherein the soluble BCMA polypeptide comprises amino acids 8 to 41 of SEQ ID NO:1.

53. (Previously presented) The pharmaceutical composition of any one of claims 19, 20, 25-27, 29, 32, 33, 35, 36, 38, 46, 47, 49, 50, and 52, wherein the BCMA polypeptide further comprises a heterologous amino acid sequence.

54. (Previously presented) The pharmaceutical composition of claim 53, wherein the heterologous amino acid sequence comprises an Fc domain of an immunoglobulin.

55. (Previously presented) The pharmaceutical composition of any one of claims 39, 40, 42, 43, and 45, wherein the BCMA polypeptide is fused to a heterologous amino acid sequence.

56. (Previously presented) The pharmaceutical composition of claim 55, wherein the heterologous amino acid sequence comprises an Fc domain of an immunoglobulin.

57. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a BCMA polypeptide effective to inhibit B-cell growth or immunoglobulin production, or both, wherein the BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 52 of SEQ ID NO:1.

58. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a BCMA polypeptide effective to inhibit B-cell growth or immunoglobulin production, or both, wherein the BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 52 of SEQ ID NO:1, and wherein the BCMA polypeptide does not comprise amino acids 53 to 81 of SEQ ID NO:1.

59. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a polypeptide effective to inhibit B

cell growth or immunoglobulin production, or both, wherein the polypeptide comprises a BCMA polypeptide consisting essentially of an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 52 of SEQ ID NO:1.

60. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a soluble BCMA polypeptide effective to inhibit B-cell growth or immunoglobulin production, or both, wherein the soluble BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least 95% identical to amino acids 1 to 52 of SEQ ID NO:1.

61. (Previously presented) The pharmaceutical composition of any one of claims 57-60, wherein the BCMA polypeptide comprises amino acids 1 to 52 of SEQ ID NO:1.